

REMARKS

Applicants wish to thank Examiner Nwaonicha for indicating allowability of Claim 23.

New Claims 30 and 31 have been added as supported at page 12, line 40 to page 13, line 5 of the specification.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 17-20, 22-26, 30-31 will now be active in this application.

The rejection of claims 17-20, 22 and 24-26 over Breikes et al in view of EP 1 142 898 (EP '898) is traversed.

Claim 17 relates to (inter alia) a method for the synthesis of a phosphorus compound, comprising:

reacting a phosphorus halide with an amine or an alcohol, thereby liberating an acid;

wherein said phosphorus halide is a compound having at least one phosphorus-halogen (P-Hal) bond;

reacting (i) said acid liberated during said synthesis and (ii) an auxiliary base to form a salt of the auxiliary base; said salt being liquid at temperatures at which the phosphorus compound is not significantly decomposed during the process of separating off the liquid salt;

forming two immiscible liquid phases, a first phase comprising said salt of the auxiliary base and a second phase comprising said phosphorus compound or a solution of said phosphorus compound in a solvent; and

separating said first phase from said second phase;

wherein said phosphorus compound is selected from the group consisting of aminodihalophosphines, diaminohalophosphines, triaminophosphines, phosphorous ester diamides, aminophosphines, diaminophosphines, phosphorous ester amide halides, aminophosphine halides and phosphonous ester halides;

wherein **the base used is selected from the group consisting of compounds of the formulae (Ia) to (Ir)....**

Applicants wish to thank Examiner Nwaonicha and supervisory Examiner Sullivan for the helpful discussion with Applicants' Representative on November 17, 2009.

The Examiners referred to column 10, example 4, lines 48-56 of Breikss et al. They argued that a phosphorus halide is reacted with an alcohol (biphenol). An acid is liberated which reacts with an auxiliary based (triethylamine) to form triethylamine hydrochloride. The Examiner further took the position that all they needed to show was that triethylamine is equivalent to other bases that are defined as the auxiliary bases in claim 17 of the present invention.

The Examiners therefore cited EP 1142898 in which a compound (II) and a compound (I) are reacted in the presence of a base a deacidifying agent. See, for example, page 12, lines 38-40. The base is described at page 13, lines 24-27. Among the bases mentioned are pyridine and pyrazine.

Even though the reactions are completely different, the Examiners still believe that it would have been obvious to replace the triethylamine of Breikss et al with the bases of EP '898. They further argue that the resulting product would inherently be liquid.

It was noted that there would be no motivation for a person of ordinary skill in the art to select pyridine or pyrazine and use them in the reaction of example 4 of Breikss et al. to obtain a liquid salt.

Further, the Examiner has not made a proper prima facie case of obviousness as none of the references discloses that two immiscible liquid phases are formed.

Further, Breikss et al., is not relevant to the instant claims.

Aspects of the present invention are

- to select an auxiliary base which forms a **liquid salt** with the liberated acid, and
- to have two separate liquid phases, one of which is formed by the liquid salt.

This is stated clearly in lines 7 to 10 of Claim 17:

“said salt being liquid..... during the process of separating off the liquid salt” and
“forming two immiscible liquid phases, a first phase”.

Breikes et al. however, use auxiliary bases that give a salt which is solid during this process of separating the salt from the mixture. The separation process is done by filtration; after filtration the filtrated solid salt is washed (see column 5, line 55 to 55 and all the examples, for example column 5, line 41 to 43).

EP 1 142 898 (EP '898) does not cure the defects of Breikes et al.

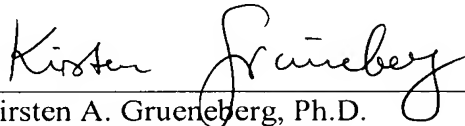
Thus, the rejection of claims 17-20, 22 and 24-26 over Breikes et al in view of EP 1 142 898 (EP '898) should be withdrawn.

Application No.: 10/500,145

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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A handwritten signature in cursive script, reading "Kirsten Grueneberg", written over a horizontal line.

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